



CONTENTS

	Page
Preface	iii
Acknowledgements	v
Characteristics of fungi	1
Selected references	3
A suggested laboratory schedule	6
Common contaminants, laboratory procedures	9
Slide culture method	10
<i>Penicillium</i> sp.	12
<i>Aspergillus</i> sp.	13
<i>Scopulariopsis</i> sp.	13
<i>Trichoderma</i> sp.	14
<i>Paecilomyces</i> sp.	14
<i>Gliocladium</i> sp.	15
<i>Cephalosporium</i> sp.	15
<i>Fusarium</i> sp.	16
<i>Geotrichum</i> (<i>Oospora</i> sp.)	16
<i>Alternaria</i> sp.	17
<i>Cladosporium</i> sp. (<i>Hormodendrum</i> sp.)	17
<i>Helminthosporium</i> sp.	18
<i>Nigrospora</i> sp.	18
<i>Mucor</i> sp.	19
<i>Rhizopus</i> sp.	19
<i>Syncephalastrum</i> sp.	20
<i>Aureobasidium</i> sp. (<i>Pullularia</i> sp.)	20
<i>Rhodotorula</i> sp.	21
<i>Streptomyces</i> sp.	21
Laboratory procedures	23
Equipment	23
Preparation of specimens	23
Table I	25
Cultivation of fungi	27
Examination of cultures	28
Mounting media	29
Staining methods	30
Media	35
Media for specific use	37
Animal inoculations	49
Maintenance of stock cultures	50
Superficial mycoses	52
External otitis	52
Piedra	54

Tinea versicolor	58
Trichomycosis axillaris	60
Tinea nigra	61
Dermatymycoses	67
Classification	67
List of dermatophytes	69
Laboratory suggestions for study of dermatophytes	71
Laboratory diagnosis	72
<i>Microsporum</i>	75
<i>Epidermophyton</i>	86
<i>Trichophyton</i>	88
Characteristics	88
Laboratory procedures	89
Ectothrix hair invasion	93
Ecto-endothrix hair invasion	97
Endothrix hair invasion	98
Hairs not invaded	102
Saprophytes	102
Deep mycoses	111
Subcutaneous mycoses	112
Mycotoma (Maduromycosis)	112
Chromoblastomycosis	117
Sporotrichosis	124
Systemic mycoses	129
North American blastomycosis	130
Paracoccidioidomycosis (South American blastomycosis)	137
Coccidioidomycosis	142
Geotrichosis	147
Aspergillosis	151
Cryptococcosis	155
Torulopsosis	163
Candidiasis	165
Histoplasmosis	172
The actinomycetes	181
Actinomycosis	182
Nocardiosis	191
Streptotrichosis	199
Miscellaneous mycoses	201
Rhinosporidiosis	202
Phycomycosis (Mucormycosis)	207
Penicilliosis	211
Cladosporiosis	213
Keratomycosis	215
Sources for media, equipment	217
Sources for cultures	218
Visual aids	218
Glossary	221
Index	223